ABSTRACT OF THE INVENTION

An end-capped quinoxaline-containing hyperbranched ether-ketone polymer having repeating units of the formula:

wherein n represents the degree of polymerization for the parent hyperbranched polymer, x represents the degree of endgroup functionalization, x has a value of 0.05 to 1.0, and G is selected from the group consisting of

$$SO_3H$$
 , SO_3H , OH OH

and alkyl having 2 to 16 carbon atoms, and a method for preparing the polymer are provided.